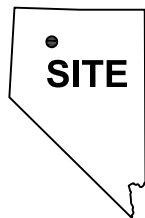


NEVADA



**SITE**

40° 52' 30" N Latitude  
117° 32' 56" W Longitude

## LOCATION MAP

### NOTES:

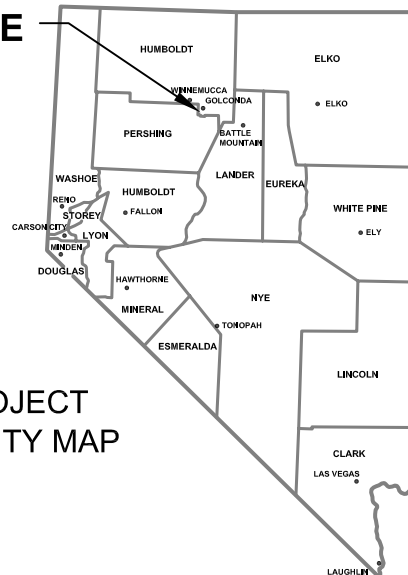
1. NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL OR AGGREGATE USE WITH OTHER DATA.
2. BASE MAP PROVIDED BY SUBTERRA, INC., AUGUST, 2005.

R 40 E

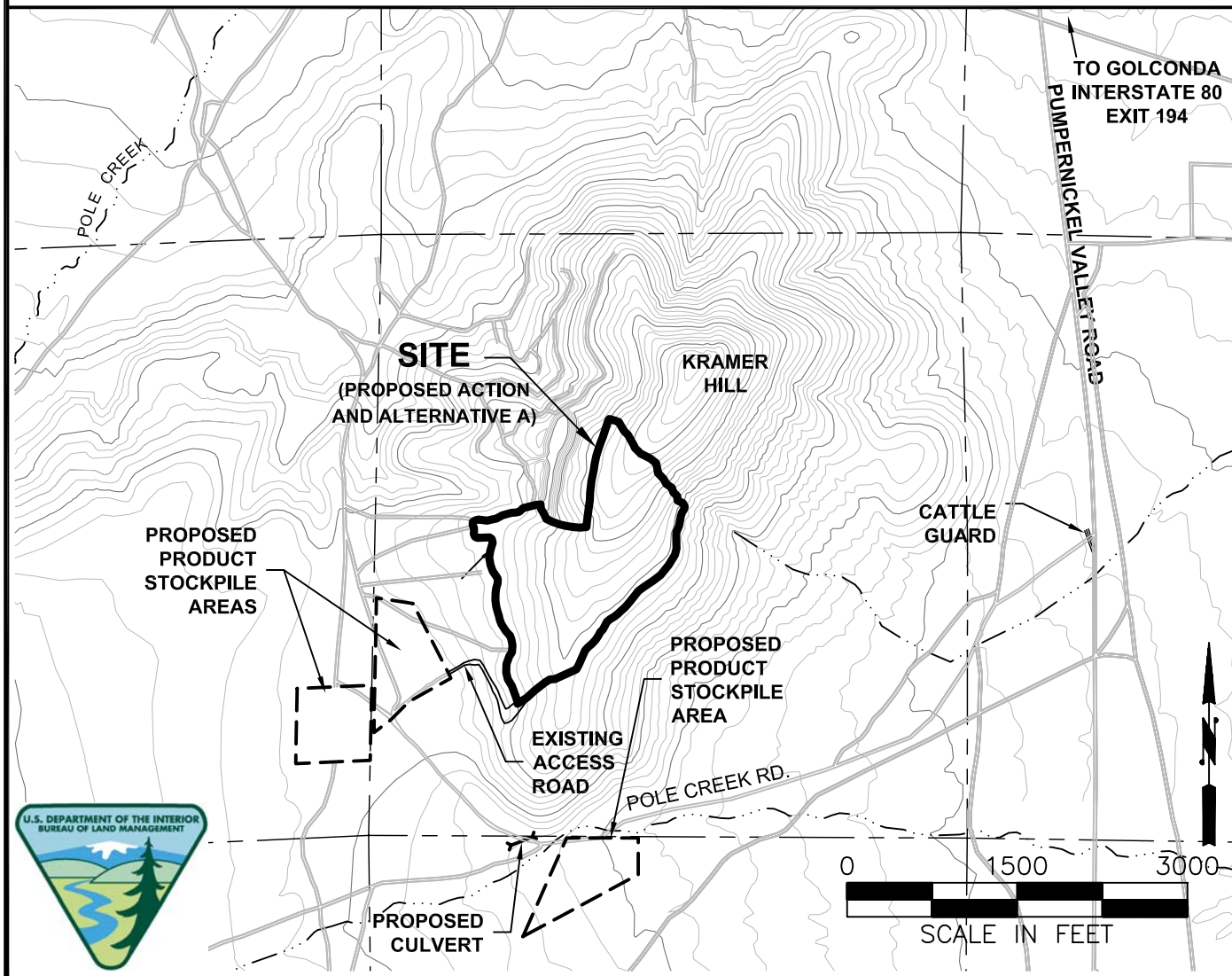
T  
35  
N

6				1
31				36

## SITE



## PROJECT VICINITY MAP



ECOLOGICAL LAND SERVICES, INC.

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DATE 12-05-06

DWN. MPM

APPR.

PROJ. #1204.01

Figure 1

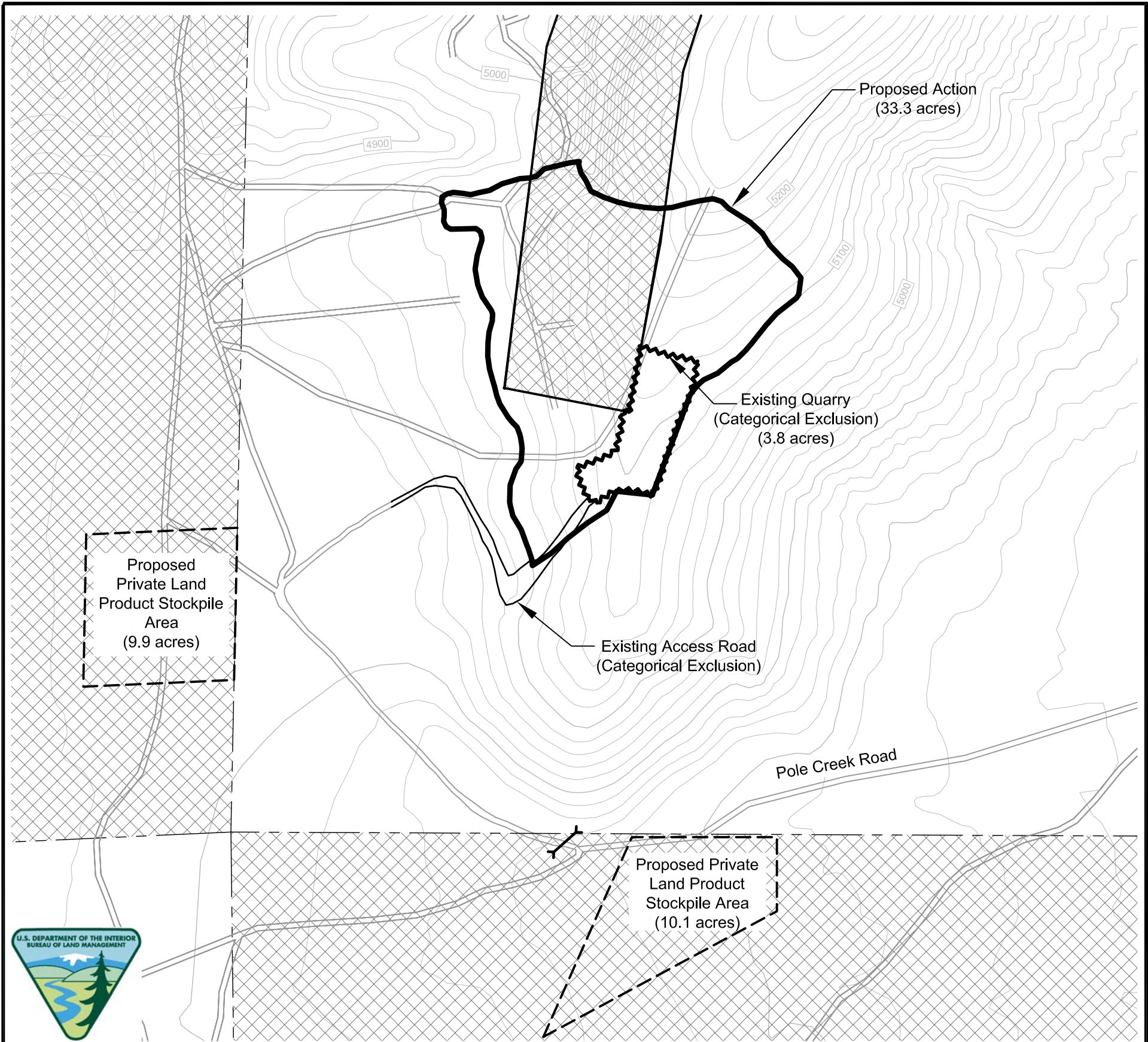
VICINITY MAP

Kramer Hill Quartzite Quarry

James Hardie Building Products, Inc.

Humboldt County, Nevada

Section 8, Township 35N, Range 40E, M.D.M. & B.



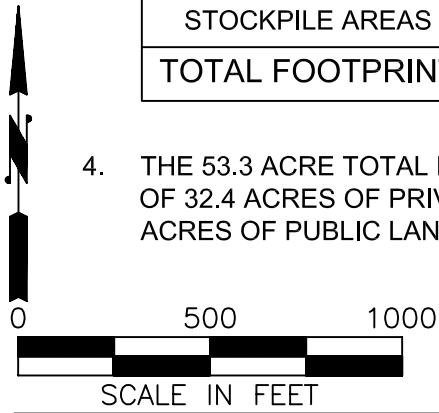
NOTES:

1. NO WARRANTY IS MADE BY THE BUREAU OF LAND MANAGEMENT AS TO THE ACCURACY, RELIABILITY, OR COMPLETENESS OF THESE DATA FOR INDIVIDUAL OR AGGREGATE USE WITH OTHER DATA.
2. EXISTING QUARRY AND ACCESS CONSTRUCTED FOR QUARRY COMPRISE LESS THAN 5 ACRES AND WERE CONSTRUCTED UNDER A CATEGORICAL EXCLUSION; (DM 516, CHAPTER 11.5, NO. F(10)).
3. PROPOSED ACTION:

MINING AREA	33.3 ACRES
STOCKPILE AREAS	20.0 ACRES
TOTAL FOOTPRINT	53.3 ACRES
4. THE 53.3 ACRE TOTAL FOOTPRINT CONSISTS OF 32.4 ACRES OF PRIVATE LAND AND 20.9 ACRES OF PUBLIC LAND.

LEGEND:

- PROPOSED ACTION QUARRY BOUNDARY (33.3 ACRES)
- EXISTING QUARRY (CATEGORICAL EXCLUSION)
- PROPOSED PRODUCT STOCKPILE AREAS (20 ACRES)
- PRIVATE LAND  
(12.4 ACRES WITHIN PROPOSED ACTION QUARRY BOUNDARY)
- EXISTING ACCESS ROAD (CATEGORICAL EXCLUSION)
- EXISTING ROADS
- SECTION LINE
- PROPOSED CULVERT
- EXISTING TOPOGRAPHIC CONTOURS  
(20 FT. INTERVALS)



Base map provided by SubTerra, Inc., August, 2005.

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Figure 2

PROPOSED ACTION SITE MAP

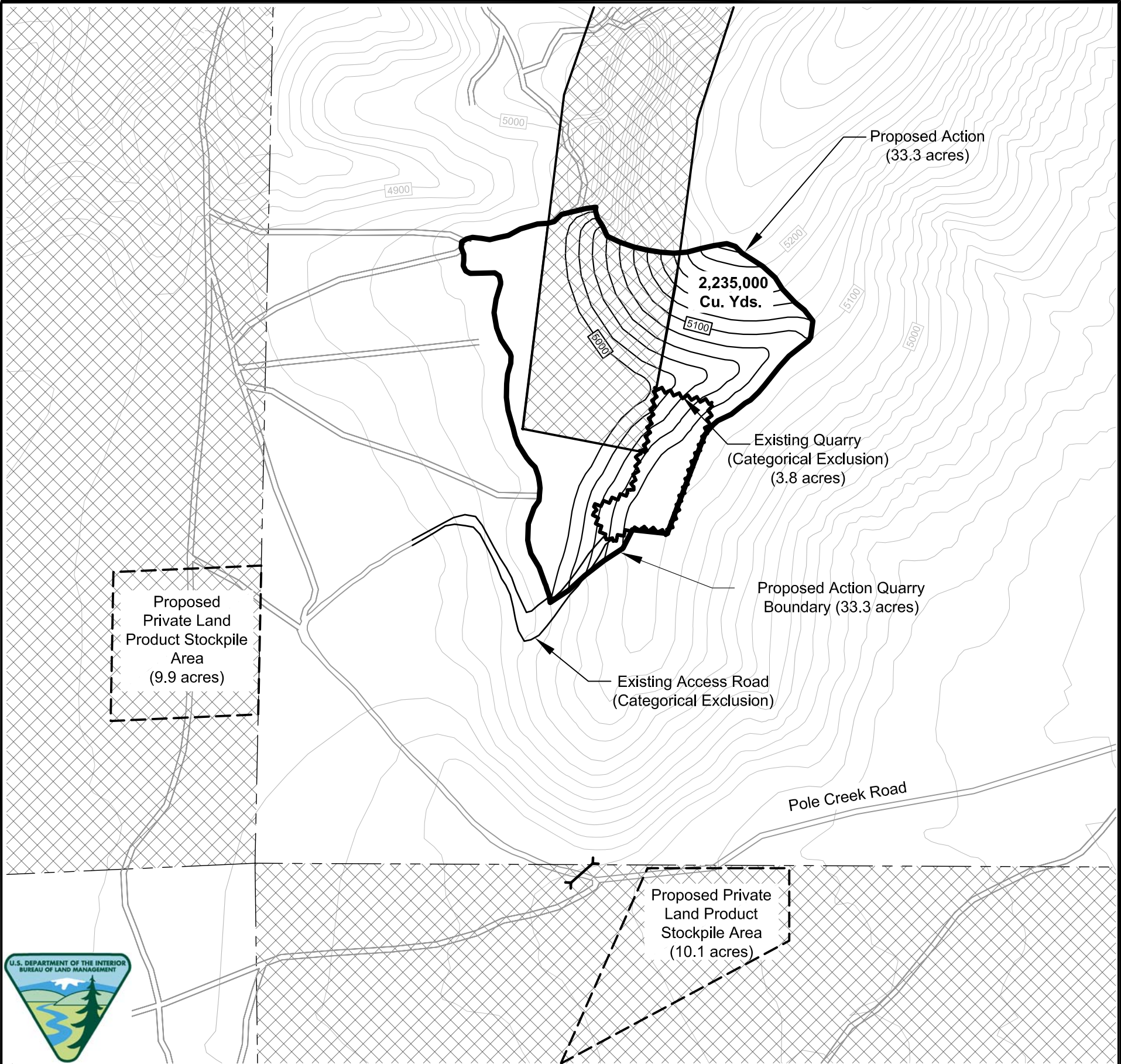
Kramer Hill Quartzite Quarry

James Hardie Building Products, Inc.

Humboldt County, Nevada

Section 8, Township 35N, Range 40E, M.D.M. & B.





**NOTES:**

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- 2.
3. EXISTING QUARRY AND ACCESS CONSTRUCTED FOR QUARRY COMPRISE LESS THAN 5 ACRES AND WERE CONSTRUCTED UNDER A CATEGORICAL EXCLUSION; (DM 516, CHAPTER 11.5, NO. F(10)).

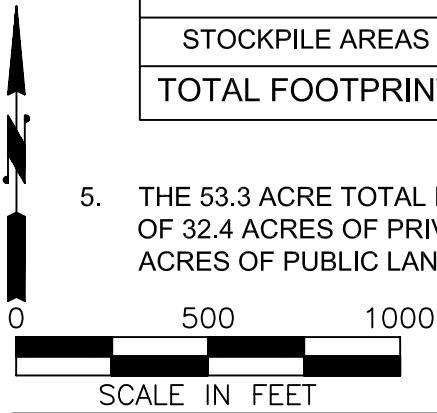
**4. PROPOSED ACTION:**

MINING AREA	33.3 ACRES
STOCKPILE AREAS	<u>20.0 ACRES</u>
TOTAL FOOTPRINT	53.3 ACRES

5. THE 53.3 ACRE TOTAL FOOTPRINT CONSISTS OF 32.4 ACRES OF PRIVATE LAND AND 20.9 ACRES OF PUBLIC LAND.

**LEGEND:**

- PROPOSED ACTION QUARRY BOUNDARY (33.3 ACRES)
- EXISTING QUARRY (CATEGORICAL EXCLUSION)
- PROPOSED PRODUCT STOCKPILE AREAS (20 ACRES)
- PRIVATE LAND (12.4 ACRES WITHIN PROPOSED ACTION QUARRY BOUNDARY)
- EXISTING ACCESS ROAD (CATEGORICAL EXCLUSION)
- EXISTING ROADS
- SECTION LINE
- PROPOSED CULVERT
- EXISTING TOPOGRAPHIC CONTOURS (20 FT. INTERVALS)
- FINAL TOPOGRAPHIC CONTOURS (20 FT. INTERVALS)



Base map provided by SubTerra, Inc., August, 2005.

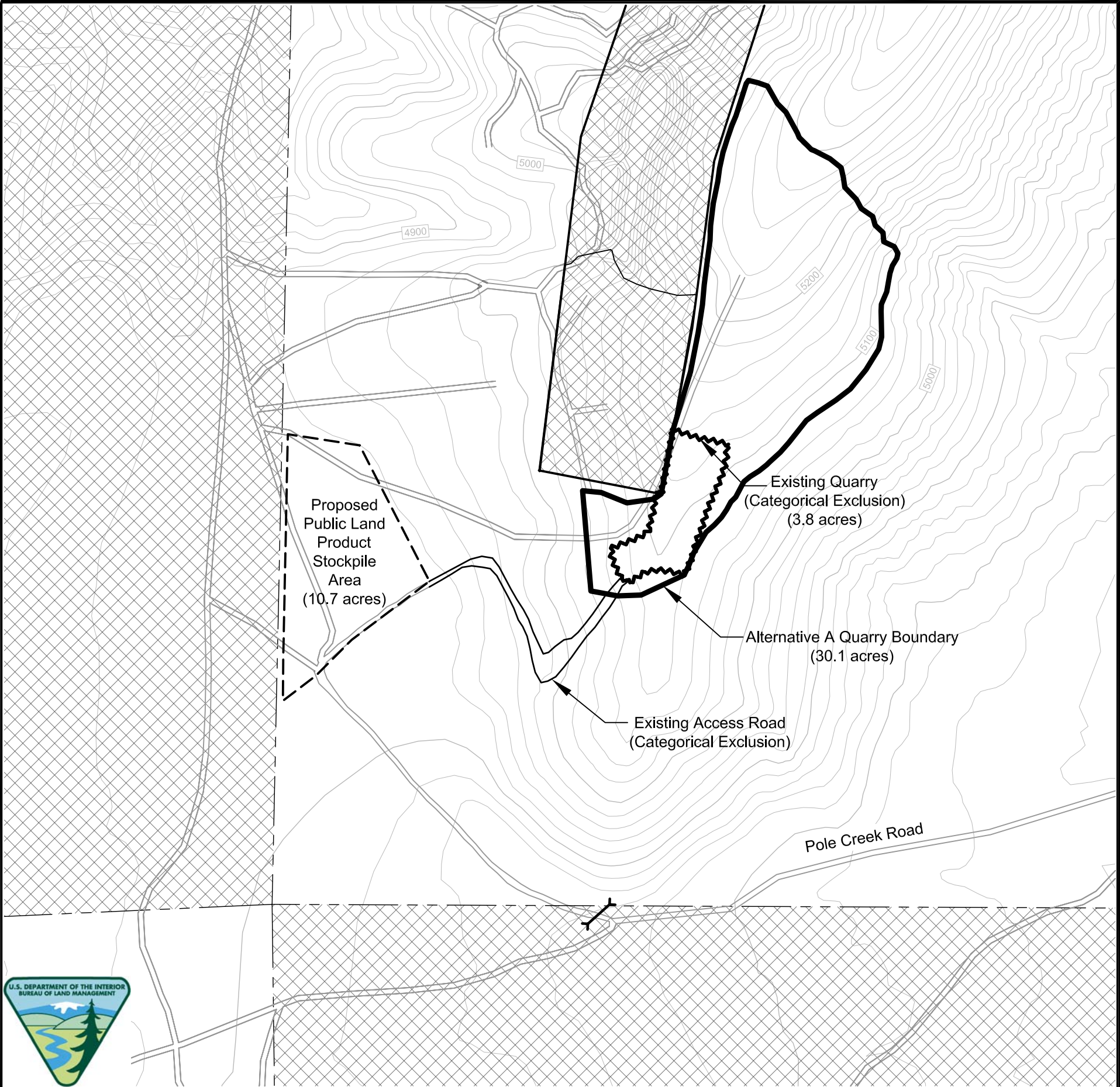
Figure 3  
PROPOSED ACTION POST MINING TOPOGRAPHY MAP  
Kramer Hill Quartzite Quarry  
James Hardie Building Products, Inc.  
Humboldt County, Nevada  
Section 8, Township 35N, Range 40E, M.D.M. & B.



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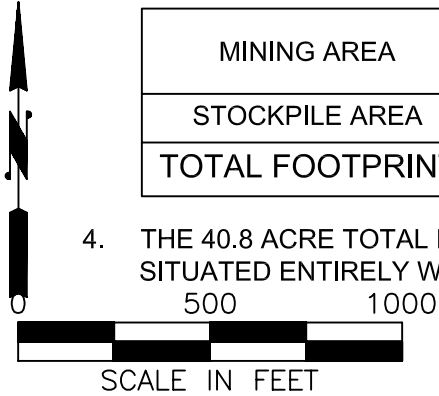


NOTES:

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- 2. EXISTING QUARRY AND ACCESS CONSTRUCTED FOR QUARRY COMPRISE LESS THAN 5 ACRES AND WERE CONSTRUCTED UNDER A CATEGORICAL EXCLUSION; (DM 516, CHAPTER 11.5, NO. F(10)).
- 3. ALTERNATIVE A:

MINING AREA	30.1 ACRES
STOCKPILE AREA	<u>10.7 ACRES</u>
TOTAL FOOTPRINT	40.8 ACRES

- 4. THE 40.8 ACRE TOTAL FOOTPRINT IS SITUATED ENTIRELY WITHIN PUBLIC LAND.



LEGEND:

- ALTERNATIVE A QUARRY BOUNDARY (30.1 ACRES)
- EXISTING QUARRY (CATEGORICAL EXCLUSION)
- PROPOSED PRODUCT STOCKPILE AREA (10.7 ACRES)
- PRIVATE LAND
- EXISTING ACCESS ROAD (CATEGORICAL EXCLUSION)
- EXISTING ROADS
- SECTION LINE
- PROPOSED CULVERT
- EXISTING TOPOGRAPHIC CONTOURS (20 FT. INTERVALS)

Base map provided by SubTerra, Inc., August, 2005.



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Figure 4

ALTERNATIVE A SITE MAP

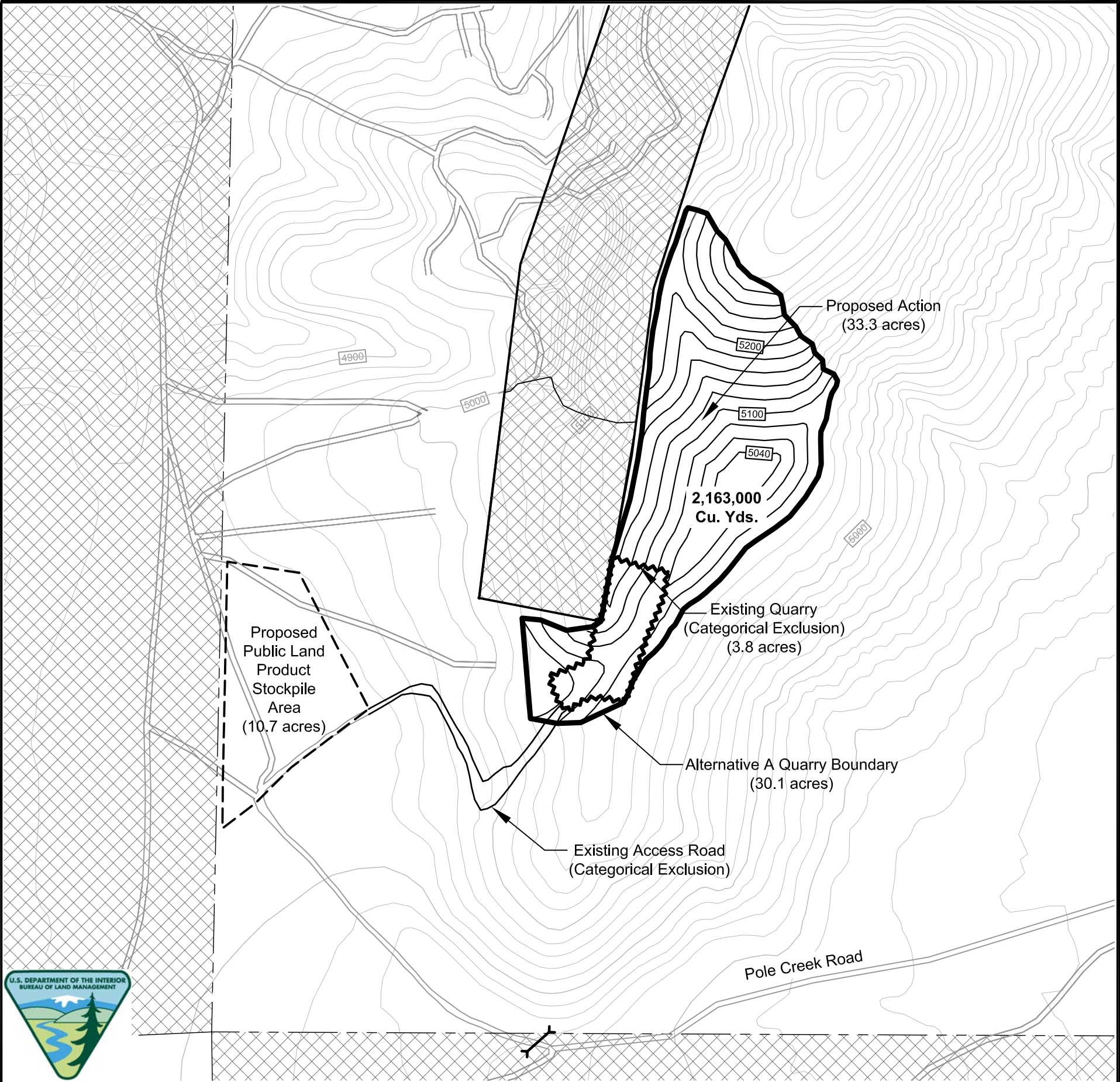
Kramer Hill Quartzite Quarry

James Hardie Building Products, Inc.

Humboldt County, Nevada

Section 8, Township 35N, Range 40E, M.D.M. & B.





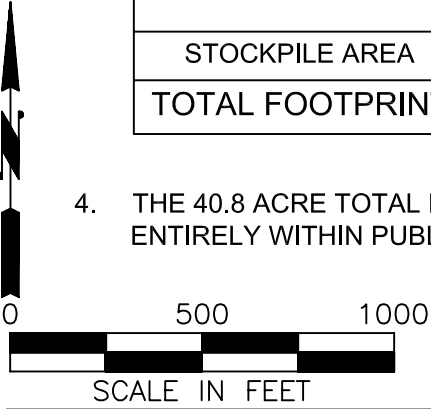
NOTES:

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- EXISTING QUARRY AND ACCESS CONSTRUCTED FOR QUARRY COMPRISE LESS THAN 5 ACRES AND WERE CONSTRUCTED UNDER A CATEGORICAL EXCLUSION; (DM 516, CHAPTER 11.5, NO. F(10)).
- ALTERNATIVE A:

MINING AREA	30.1 ACRES
STOCKPILE AREA	10.7 ACRES
TOTAL FOOTPRINT	40.8 ACRES
- THE 40.8 ACRE TOTAL FOOTPRINT IS SITUATED ENTIRELY WITHIN PUBLIC LAND.

LEGEND:

- ALTERNATIVE A QUARRY BOUNDARY (30.1 ACRES)
- EXISTING QUARRY (CATEGORICAL EXCLUSION)
- PROPOSED PRODUCT STOCKPILE AREA (10.7 ACRES)
- PRIVATE LAND
- EXISTING ACCESS ROAD (CATEGORICAL EXCLUSION)
- EXISTING ROADS
- SECTION LINE
- PROPOSED CULVERT
- EXISTING TOPOGRAPHIC CONTOURS (20 FT. INTERVALS)
- FINAL TOPOGRAPHIC CONTOURS (20 FT. INTERVALS)



Base map provided by SubTerra, Inc., August, 2005.

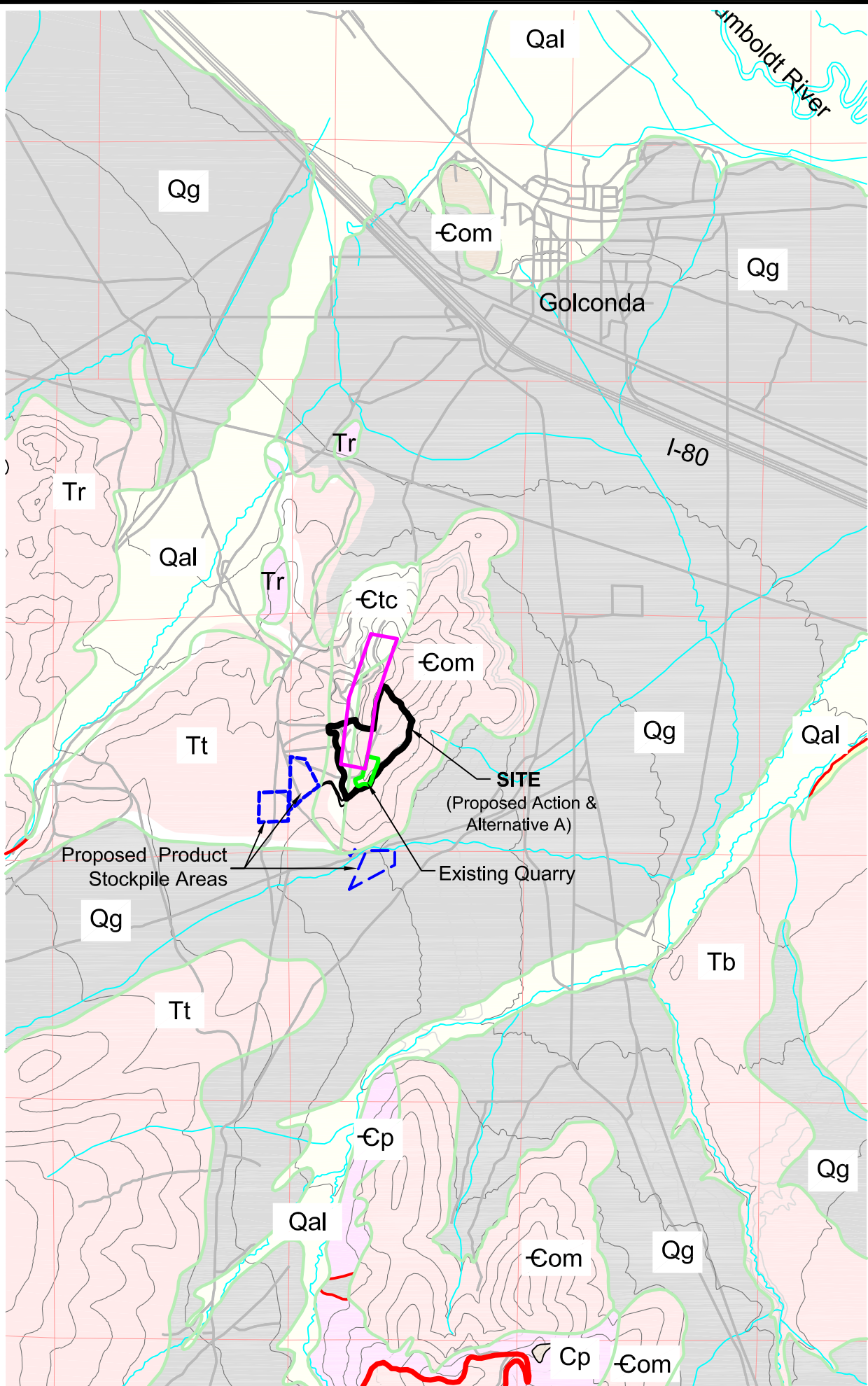
Figure 5  
ALTERNATIVE A POST MINING TOPOGRAPHY MAP  
Kramer Hill Quartzite Quarry  
James Hardie Building Products, Inc.  
Humboldt County, Nevada  
Section 8, Township 35N, Range 40E, M.D.M. & B.



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### LEGEND:

- Qal** **Alluvium** (Quaternary). Silt, sand, and clay along Humboldt River and its tributaries.
- Qg** **Gravel** (Quaternary). Fan gravels and pediment veneer incised by recent drainages.
- Tb** **Basalt Flows** (Pliocene). Vesicular basalt and dense, black divine basalt flows.
- Tr** **Quartz Latite** (Miocene). Chiefly welded tuffs.
- Tt** **Tuff** (Miocene). Chiefly non-welded with minor volcanic sands and conglomerate.
- Cp** **Preble Formation** (Upper & Middle Cambrian). Dark gray phyllitic shale with some interbedded limestone. Intensely deformed with contorted bedding.
- Etc** **Twin Canyon Member** (Lower Cambrian?). Interbedded phyllitic shale and impure quartzite in uppermost position of the Osgood Mountain Formation.
- Com** **Osgood Mountain Formation** (Lower Cambrian?). White to light gray, thin bedded to massive, medium grained quartzite.

### NOTES:

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2. BASE MAP PROVIDED BY SUBTERRA, INC., AUGUST, 2005 FROM USGS QUAD MAPS GQ 656 & 1174.



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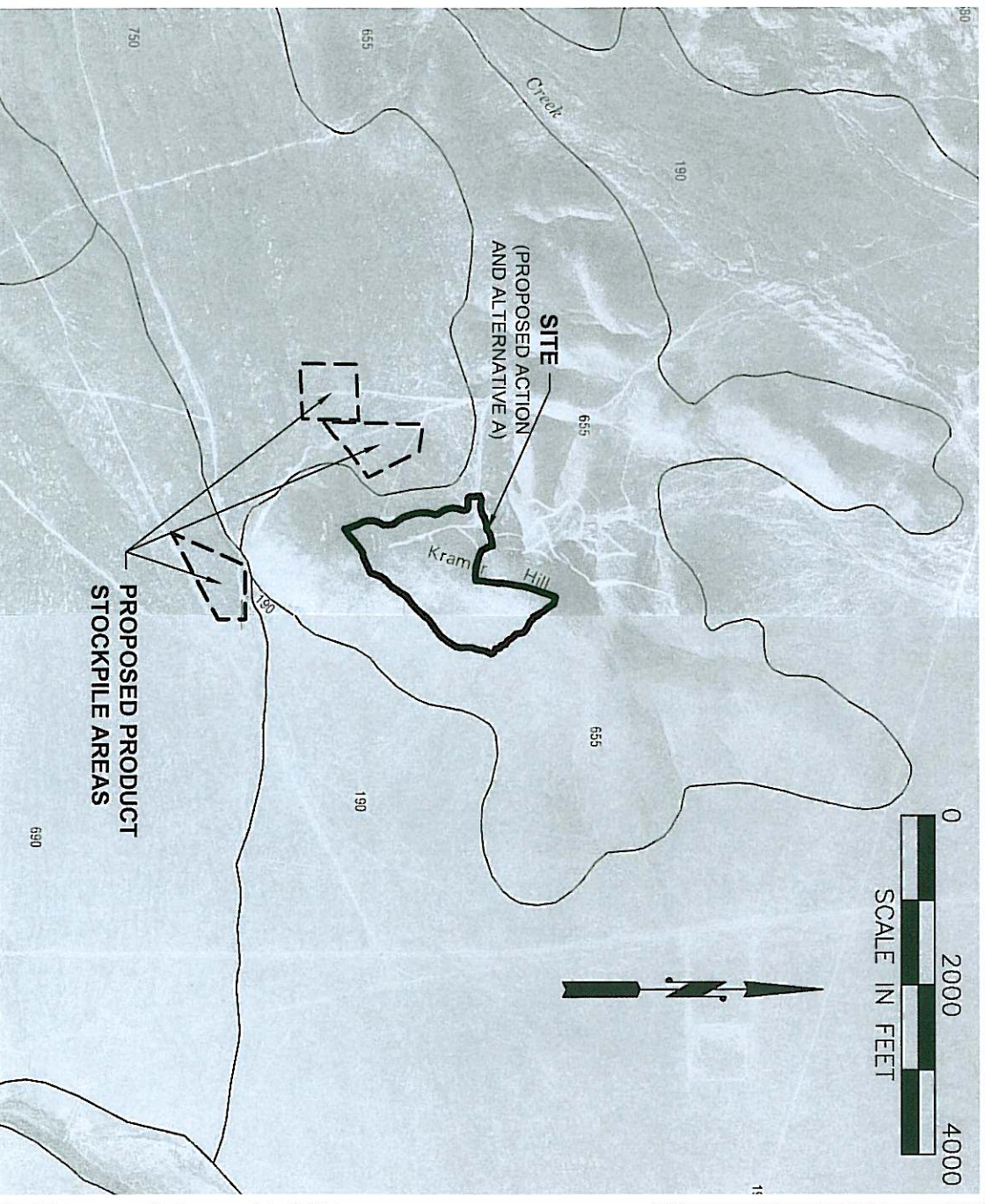
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Figure 6  
REGIONAL GEOLOGY MAP  
Kramer Hill Quartzite Quarry  
James Hardie Building Products, Inc.  
Humboldt County, Nevada  
Section 8, Township 35N, Range 40E, M.D.M. & B.





**655** Soughe-Hoot association; 60% Soughe extremely gravelly fine sandy loam, 15 - 50% slopes, well drained. 25% Hoot very cobbly loam, 15 - 50% slopes, well drained.

**750** Snapp-Oxcorel association; 50% Snapp very fine sandy loam, 2 - 8% slopes, well drained. 40% Oxcorel gravelly very fine sandy loam, 2 - 8% slopes, well drained.

**690** Sodhouse-Golconda association; 45% sodhouse very stony very fine sandy loam, 2 - 8% slopes, well drained. 40% Golconda very fine sandy loam, 2 - 8% slopes, well drained.

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2. MAP PROVIDED BY U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICES, GOLCONDA QUADRANGLE, POLE CREEK SERIES, NV. SOIL SURVEY WAS COMPLETED IN 1991 AND ISSUED IN 2002. ORTHOPHOTO WAS PRODUCED IN 1975.



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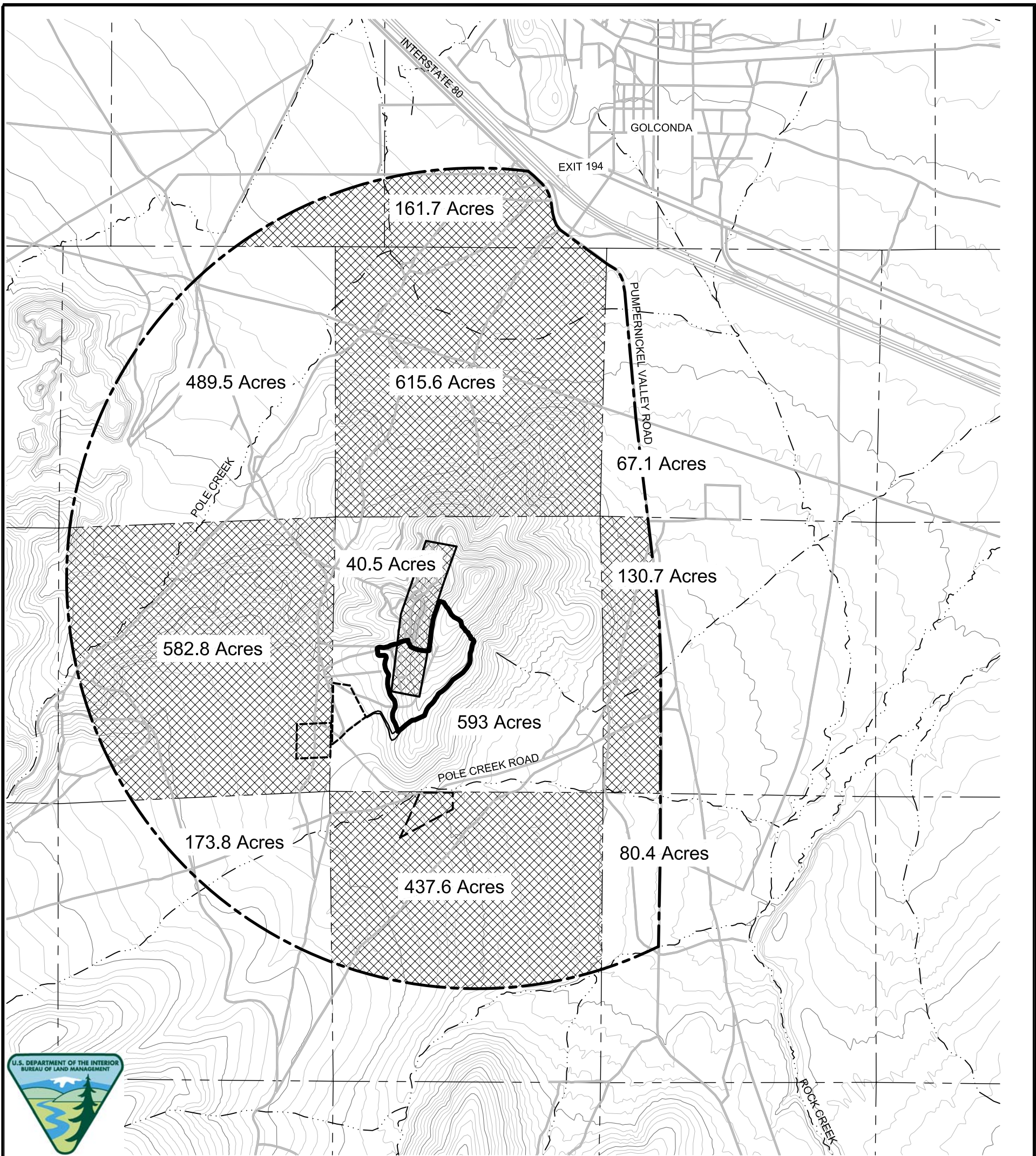
**Figure 7**

**SOIL SURVEY MAP**

Kramer Hill Quartzite Quarry  
James Hardie Building Products, Inc.  
Humboldt County, Nevada

Section 8, Township 35N, Range 40E, M.D.B. & M.



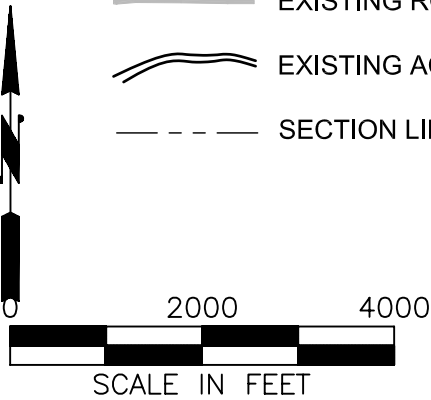


**LEGEND:**

	EXISTING TOPOGRAPHY		PROPOSED ACTION & ALTERNATIVE A QUARRY BOUNDARY
	PERENNIAL & INTERMITTENT STREAMS		PROPOSED PRODUCT STOCKPILE AREAS
	EXISTING ROADS		<b>CIA</b> - CUMULATIVE IMPACT ASSESSMENT AREA BOUNDARY
	EXISTING ACCESS ROAD		PRIVATE LAND - (1,969 ACRES WITHIN <b>CIA</b> )
	SECTION LINES		PUBLIC LAND (BLM) - (1,404 ACRES WITHIN <b>CIA</b> )

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2. BASE MAP PROVIDED BY SUBTERRA, INC., AUGUST, 2005.





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Figure 8

CUMULATIVE IMPACT ASSESSMENT AREA MAP

Kramer Hill Quartzite Quarry

James Hardie Building Products, Inc.

Humboldt County, Nevada

Section 8, Township 35N, Range 40E, M.D.M. & B.